August 6, 2013

Lashun Cross, Senior Planner
Contra Costa County Department of Conservation and Development
Community Development Division
30 Muir Road
Martinez, CA 94533

Subject: Phillips 66 Company Propane Recovery Project DEIR

Dear Ms. Cross,

Bay Area Air Quality Management District (District) staff has reviewed the County’s Draft Environmental Impact Report (DEIR) for the Propane Recovery Project (Project) located at the Phillips 66 Refinery in Rodeo. The Project proposes constructing and operating new facilities to recover propane from refinery fuel gas and increase the volume of butane for sale off-site. This includes adding new processing and ancillary equipment at the existing processing units; constructing propane recovery and hydrotreating plants; adding propane vessels and treatment facilities; adding new pipelines and tie-ins to existing pipelines; constructing two additional rail spurs and loading racks; and demolishing unused nearby equipment to accommodate the proposed refinery modifications.

The Project will require an Authority to Construct from the District and revisions are needed to the refinery’s Title V permit. Staff submits the following comments as a Responsible Agency under CEQA (§15096) regarding the air quality and greenhouse gas analysis.

Supplemental Information

Staff reviewed the air quality and greenhouse gas emissions (GHG) analysis in the DEIR to verify emissions estimates. However, the DEIR provides no supportive technical detail to determine if emission estimates are accurate. In addition, the supplemental documents requested by District staff had missing information. Without this information, staff is unable to determine if calculations and emissions estimates are correct, and thus, cannot support the conclusions related to the significance of air quality or GHG impacts.

Health Risk Assessment

Staff reviewed the two Health Risk Assessments (HRAs) prepared to evaluate the Project’s potential health impacts to current and future nearby sensitive receptors. This included one HRA assessing the emissions increase from refinery modifications and another assessing the emissions increase from locomotive activity. Staff recommends the DEIR include a cumulative impact analysis on the potential health effects from the added refinery and locomotive emissions, since they will occur simultaneously, as further described below. The District also provides specific guidance on conducting an HRA which is available at the following web site: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.
Staff recommends the following be included in the evaluation of cumulative risk and hazard impacts:

- Create an evenly spaced receptor grid across all potentially affected residential areas
- Model stationary emissions as point sources and mobile emissions as volume sources to more accurately characterize emissions and concentrations
- Estimate emission concentrations along each grid point
- Justify the distribution of added locomotive activity traveling north and south of the refinery
- Clearly identify the maximum exposed individual that considers emissions from both stationary and mobile sources
- Compare modeling results to the County’s cumulative risk and hazard thresholds
- Include all modeling parameters and assumptions in the DEIR for public review

**Greenhouse Gas Emissions**

Staff understands that the Project relies upon the decommissioning of an on-site process heater (Unit 240 B-401) and hydrogen plant (Unit 240 Plant 4) in 2011 to provide emissions offsets that are used to fully mitigate potentially significant impacts to GHGs. The District supports the shutdown of older, more polluting, equipment and recognizes the value of offsets when complying with its rules and regulations. However, staff is unable to verify the quantity of GHG emissions reduced by the shutdown of Unit 240 or by replacing propane with natural gas in the refinery’s fuel gas stream. Furthermore, staff is concerned that emissions from Unit 240 may have shifted to other existing equipment due to increased operating demand. The DEIR should include the following information:

- Calculations used to estimate emission reductions from the Unit 240 shutdown
- Calculations used to estimate emission increases from new and modified sources
- Demonstrate that emission reductions are permanent, real, and quantifiable

District staff is available to assist the County in addressing these comments. If you have any questions, please do not hesitate to contact Ian Peterson, Environmental Planner II, at (415) 749-4783 or ipeterson@baaqmd.gov.

Sincerely,

Jean Reggenkamp  
Deputy Air Pollution Control Officer

cc: BAAQMD Director John Gioia  
BAAQMD Director David Hudson  
BAAQMD Director Mary Piepho  
BAAQMD Director Mark Ross